

Volume I: Summary Report

**Study of Feasibility and Efficacy of State of Vermont Contracting for Importation,
Transportation, Warehousing and Wholesale Distribution of Liquor**

Final

Prepared for

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Agency of Administration

Contract 7635



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EXECUTIVE SUMMARY

Overview

The Vermont State Legislature directed that the Vermont Secretary of Administration conduct a study of purchasing, transportation, warehousing, and wholesale distribution functions of the Department of Liquor Control (DLC) to determine whether these functions could be handled more cost-effectively through alternative delivery systems (Act 122, Section 76a of the 2004 Legislative Session). The mandated study was performed by Management Analysis, Incorporated (MAI) of Vienna, VA, under contract to the Department of Administration.

This final report comprises three volumes, of which this is Volume I. The volumes are:

Volume I: Summary Report. An overview of the study process, findings, and recommendations.

Volume II: Full Report. The MAI Study Team's full analysis, with supporting data.

Volume III: Supplemental Data. Copies of large reports, Request for Proposals, and other information, primarily obtained from other states.

Before proceeding to specific findings, we note that the State of Vermont is a "Control State"; that is, it is one of 18 states (and one county in Maryland) which are directly involved in the sale of distilled spirits. The State of Vermont wholesales and distributes spirits only to privately-owned retail stores ("Agents") through the DLC. The State adopted this model and a conservative approach to the marketing of spirits, in an effort to promote socially responsible consumption of spirits. While the State generates revenue from the sale of spirits, the existing control structure was not established with revenue generation as its primary intent. It is clear that the State could enhance its revenue generation through relaxation of control or more aggressive marketing of liquor. However, in keeping with the State's emphasis on a socially responsible approach, this report considers only alternatives which retain the existing retail controls and philosophical approach.

Major Findings

- Under Vermont State Law (3 V.S.A § 343), a function currently performed by State employees cannot be contracted to a private sector service provider unless a cost reduction equal to ten percent or greater of the State's cost of performing the function can be demonstrated. This is a typical criterion for evaluating the potential contracting of service performed by appropriated funds, similar to that employed by other states. However, the DLC is not an appropriated-fund service provider; it is a largely self-supporting enterprise fund which generates revenue for the State. Evaluation of potential contract alternatives should consider both cost reduction and revenue enhancements, as well as cash flow, in order for the State to make a sound business decision.
- The first primary alternative considered by this report is contracting out purchasing, warehousing, distribution, and associated functions (exclusive of law enforcement) via traditional service contract. This alternative is less expensive than current in-house operation by an estimated \$700,000 over a five-year period, and offers some limited opportunities for both cost reduction and revenue growth. The savings is reduced to \$450,000 if payouts of State employee leave are considered. However, these limited opportunities do not present a compelling case for a contract. They provide a net improvement less than six percent in cost

and revenue performance (3.7 percent if employee leave payouts are considered). In addition, some of these same results can be achieved through process improvements by the current DLC organization, without contract implementation.

- The second primary alternative considered is a less traditional form of privatization, modeled on one completed by the State of Maine. In essence, this alternative entails selling the rights to perform its liquor purchasing, warehousing, distribution, and associated functions (exclusive of law enforcement) for an extended period (at least ten years). The State would receive a significant up-front payment, and would enter into a profit-sharing agreement with its selected partner. This alternative is not recommended. Over the full ten-year term of the agreement, the State would receive less revenue than from continued in-house operation. For example, if the State of Vermont received a \$15 million payment from a vendor in Fiscal Year (FY) 2006, a decrease in future revenues of approximately \$20 to \$25 million should be anticipated over the next ten years. However, if the State requires additional revenue in FY 2006, and is willing to forego longer-term revenue to achieve this goal, this could be an attractive option.
- The current DLC organization generally performs its responsibilities in an effective and dedicated manner. It is not expending resources at an excessive level; to the contrary, some of the potential improvements which exist are due to the DLC's failure to expend resources on necessary investments. The recommended course of action is to continue in-house performance of most operations with some operational improvements, in particular to improve planning and management of the DLC's information technology support. The DLC's IT staff is too large for the designated mission (large compared to other control states). It does not effectively plan the DLC's IT program, and does not optimize resource utilization.
- The MAI Study Team recommends that the DLC:
 - Not fill the anticipated vacancy of a Clerk C (PG13) (position to become vacant in FY 2005), with annual savings of approximately \$40,000 per annum. Full savings will be realized in FY 2006.
 - Retain a consultant to develop a Request for Proposal for barcoding and scanner software in the DLC warehouse, at an estimated cost of \$25,000 in FY 2005.
 - Implement new warehouse software in FY 2006, to improve efficiency and accuracy of warehouse operations, at an estimated cost of \$200,000.
 - Following implementation of the new software, eliminate one Warehouse Worker (PG10) and one Systems Developer (PG20) at the end of FY 2006. These staff reductions will reduce annual operating costs by \$78,000 per annum.
 - In the aggregate, these steps will improve cost-effectiveness and efficiency of DLC operations. Beginning in FY 2007, an annual savings of \$119,000 will be achieved.
- The license fees charged by the State of Vermont for parties wishing to sell beer, wine, and liquor are among the lowest in the nation. Increases of between 50 and 100 percent would bring Vermont in line with typical State license structures, and would generate more than \$500,000 in additional revenue per annum.
- The DLC, a State Enterprise Fund, has operated with negative retained earnings for the past two years. A positive retained earnings of \$2.64 million in 1990 had shrunk to negative \$190,756 by the end of FY 2004. This reduction is due to a number of factors, to include one-time accounting adjustments, but the primary factor has been the annual administrative transfer to the General Fund, which has a cumulative total of nearly \$6 million over this

period. This is a problem, in that the DLC does not have the resources to absorb any significant financial setback without delaying payments to brokers for products sold. MAI recommends that a retained earnings goal be established, and that the size of the administrative transfers be scaled back to allow the DLC to reestablish retained earnings of \$500,000 over the next four years. Special approval could be obtained by the DLC to accumulate funds over this level to support major capital requirements, such as warehouse renovation.

More detailed recommendations are presented in the Summary of Recommendations section of this Volume. More detailed rationale for these recommendations are presented in Volume II.

METHODOLOGY

This study was initiated by the State via a contract signed on September 30, 2004. The study efforts since that date may be broken into six general tasks:

1. Orientation and Project Planning
2. Initial Data Collection
3. Benchmarking and External Data Collection
4. Development of Draft Report
5. Receipt and Discussion of State Comments
6. Development of Final Report

A brief discussion follows.

The study began with an initial site visit to Montpelier in October 2004. The MAI Project Manager met with the Commissioner of Finance and Management, the Liquor Control Commissioner, and a Budget and Management Analyst to discuss the study and its background. Following this meeting, MAI had a group meeting with the DLC managers and received an initial tour of the DLC warehouse and offices. A second visit was held in November 2004, and several activities were completed:

- Detailed interviews with DLC management team members
- Direct observation of DLC warehousing operations
- Collection and review of DLC annual reports, financial data, workload data, policies and procedures, staffing and organization charts, and other pertinent data
- Introductory conference call with the three Liquor Control Board Members, and in-person meeting with one Board Member
- Interviews with representatives of other State agencies to include:
 - Agency of Administration. Finance and Management, Human Resources, and Buildings and General Services
 - Office of the Attorney General

The information collected in this manner provided the MAI Study Team with a basic understanding of the DLC's operation and environment. We then began a phase of external data collection whose purpose was to draw upon other control states' experience, obtain benchmarking data, and learn the views of other stakeholders. The effort included:

- On-site visit to the State of Maine, to discuss its recent liquor privatization experience. The Study Team met with State officials and the contract service provider, and toured the contract warehouse.
- On-site visit (Maryland) and tour at the government-operated warehouse facility of the Montgomery County Department of Liquor Control.
- Telephonic and/or electronic interviews with representatives of the 18 other control jurisdictions.
- Review of Annual Reports, earlier privatization studies, and other documents from all 18 control jurisdictions other than Vermont.

- Telephonic interview with the National Alcohol Beverage Control Association (NABCA).
- Telephonic interview with the Distilled Spirits Council of the U.S. (DISCUS).
- Telephonic interviews with various distillers and brokers.
- In-person interviews with selected Vermont State Agents and a site visit to an Agent-operated store.
- Contact with the Vermont State Employees Association (VSEA).

A Draft Report, delivered on December 10, 2004, presented MAI's initial findings. Following review of the Draft by the Agency of Administration and DLC, a series of on-site meetings were held in Montpelier on December 22, 2004 to discuss the State's questions and comments. The Final Report, delivered on January 18, 2005, reflected the Study Team's consideration of the State's comments. This Final Report (Revised), delivered January 31, 2005, contains the same recommendations as the January 18 version, but adds additional information on other state liquor programs which was received after January 18, and makes several editorial corrections.

Acknowledgements

In the course of this study, the Study Team interacted with a large number of State personnel. We interviewed, presented with data requests, and sent requests for clarification. We received, without exception, full cooperation and support from the State Personnel with whom we worked. This contribution greatly contributed to our ability to submit a complete, and hopefully useful, report. The role of the Secretary of Administration's staff in helping to coordinate data requests, identify points of contact, and resolve policy issues was particularly important.

However, we would like to single out for special acknowledgement the staff of the Vermont Department of Liquor Control. For obvious reasons, a study such as this creates a degree of concern and apprehension among those with the greatest potential to be affected by its results. Despite this, the staff of the DLC maintained, throughout our interactions, a high level of professionalism and cooperation which reflects well on both the organization and its management. The MAI Study Team greatly appreciates this support.

SUMMARY OF RECOMMENDATIONS

The following are recommendations and findings of the study. Please note that we have not repeated in this summary section recommendations already presented in the Executive Summary. More detailed rationale for all recommendations are presented in Volume II.

1. Consider a mandatory twice annual reorganization of the warehouse stock distribution to improve efficiency. For the cost of a weekend of overtime, the warehouse could increase efficiency in picking operations, especially if assisted by staff of the DLC IT group at the same time, by completely reorganizing its inventory storage rack address system. The IT staff could update the item locations in the warehouse management system as each section of the warehouse is reorganized. The current layout of existing stock does not make full use of the potential of the warehouse.
2. Consider a new method of linking the liquor case barcode number to a location address in the current database and renumbering all racks, shelves, and floor space areas as coordinate locations. For example: tag all rows in the warehouse with a number, tag all vertical racks with an address starting at one end of a row, and then tag each shelf as a letter of the alphabet. The stock picker would receive a pick list that was truly informative and had all pulls in a logical order that minimize back-tracking or criss-crossing the warehouse to fill an order. In the example below a new Pick List system based on this philosophy provides a case location as 3A8, which translates to 3rd row, ground level, rack 8 in that row:
 - Each Row is assigned a Row identifier such as 1 or 2 or 3, where #1 is the first row along a wall.
 - Each Shelf is assigned a Shelf identifier such as A or B or C, where A is always the area on the ground floor under the rack.
 - Each Rack is assigned a Rack Identifier such as 1 or 2 or 3, where #1 is always at the same end of the row and on the same side of the row.
3. Consider contracting for a complete warehouse and purchasing operations systems analysis and requirements definition study to identify current and outyear requirements for stock management data, data collection, data storage, data reporting, and data security. The study should provide a significant level of detail of analysis and the production of resulting requirements statements so that its final product is a suite of recommendations with current year and proposed implementation year costs for the purchase, installation, and maintenance of both hardware and software. Several Control commissions, such as Virginia and Montgomery County, are in the design phases of systems which have modules that could be duplicated less expensively in Vermont as compared to having the DLC IT staff start from scratch to design a system.
4. Install a new (see above) inventory management system as the first phase of an integrated warehouse and purchasing operations system. In addition to restructuring the placement and addressing of the liquor, beer, and wine items in the warehouse to make better use of space and to allow improvements in the pick list process (see above), the following items are recommended as minimum requirements for a new warehouse management/inventory control system for the warehouse. A new system must at least be able to permit the staff to:
 - Scan a barcode on case deliveries from manufacturers/brokers against a barcode on a bill of lading upon arrival.

- Scan a barcode on case/bottle/sub-pack returned to warehouse stock from Agency Stores, i.e., items returned as incorrect deliveries, or damaged, recalled, or otherwise no longer for sale stock.
 - Receive a row, section, shelf, and bin storage location identification (ID) code back from the system upon scanning received items coming off the delivery truck.
 - Scan a barcode on a case and/or a sub-pack set (within cases) to place the item into inventory database upon verification of delivery against bill of lading.
 - Scan sub-packs from multi-pack cases into the inventory database as an item separate from the case or at least be able to have a case of sub-packs converted to a quantity of individual sub-packs in the inventory database.
 - Receive pick list created from the Agent's order automatically after system verifies available quantities in stock. The resulting pick list items should be showing products in row, section, shelf, and bin location order.
 - Scan a barcode on the pick list to open a pick list verification file and scan it again to close a pick list verification file
 - Scan barcodes on items when pulled from shelves via wireless scanners.
 - Scan barcodes on items as they pass by a control station on the conveyor system to re-verify picks as items are consolidated for staging in pre-loading areas.
 - Produce an outgoing bill of lading with existing information from the Controller's final scan results of the picked items
 - Scan barcodes on items when delivered to Agency Stores to verify delivery.
 - Enter adjustments by Drivers for count errors, wrong picks, breakage, or returns/transfers into a handheld or truck-mounted unit at Agency Stores at the time of delivery.
5. The following are recommended standard warehouse operations reports that should be produced and tracked monthly:
- Total of the number cases of spirits, wine, and beer (listed separately) shipped per month, for determination of rough Full-Time Equivalent (FTE) to Cases Shipped ratio to compare month-to-month and to other Control State operations.
 - Average warehouse workers on duty daily and total hours worked by those present on order pulling.
 - Average orders to fill per day over the course of the month.
 - Average number of cases pulled per day over the course of the month.
 - Average number of cases loaded per truck per day over the course of the month.
 - Average warehouse workers on duty daily and total hours worked by those present on truck loading.
 - Average Drivers on duty daily and total hours worked by those present on order pulling.
 - Average Drivers on duty daily and total hours worked by those present on truck loading.
 - Number of incoming delivery trucks from suppliers unloaded per month.
 - Average number of days notice before Supplier delivery truck arrival.
 - Number of "out-of-stock" items that had to be taken off Agent orders per month.

- Number of days per month when stock pulling carried over to next day.
 - Number of mis-shipped items returned by Driver for credit per month.
 - Number of miles driven per month per truck.
6. Consider purchase or five year lease of a replacement fork lift. Due to indoor air quality problems reported at other Control State warehouses, consider phasing out the propane fueled Material Handling Equipment and replacing them with electric systems.
 7. Consider upgrading electric fork lift charging stations to improve safety, reduce recharge time, and reduce power consumption.
 8. Consider development of a forecasting systems for the Agents that provides a recommended 1-to-1 Replenishment Order automatically to the Agent's purchaser which can be accepted or manually updated to create a final order for the DLC. The draft order should be available for review by the Agent, who can adjust the order based on recent holiday or promotional sales, or, under normal conditions accept it.
 9. Establish a "business reinvestment" fund or cost center for the DLC to facilitate its entrepreneurial efforts. This fund could have a legislatively adopted biennial limitation, and be self-funded by Other Funds, Miscellaneous Revenues. The DLC could use the fund to reinvest recently developed miscellaneous fees and penalty charges in improving merchandising operational efficiency and customer service. This change would allow the DLC to operate more as a business, continually reinvesting efficiency savings.
 10. Consider obtaining a legislative opinion as to the possibility of retaining funds generated when the DLC tries to absorb the liquor suppliers' stock maintenance workload, and charges suppliers a fee to do so. A reinvestment fund would allow DLC to use suppliers' fees to provide them much needed services, such as relabeling.
 11. With a reinvestment fund, revenue could be generated through a variety of methods, such as penalty charges used to discourage over-shipments by suppliers, a 0.5% one-to-three year surcharge on the per bottle price, or bottle pick fees for Agents. The retained earnings could be directed to purchasing new warehouse equipment, such as racks, conveyor parts, forklifts and other equipment, supplies and personal services. Another use of "other revenue" projects might be to sub-contract out the recycling process, including bottle returns and processing and weekly cardboard haulage.
 12. Consider the increase of Temporary Price Reduction (TPR) buyouts. If the product is not going to go on sale within the next two months, the DLC could push delivery of a 60-day supply of inventory at the close of a TPR. The increased purchasing of fast moving items when prices have dropped would have an impact on store storage in the short term, but the product could be redistributed as sell-outs occur, and the DLC would have had a two month longer supply of the less expensive per bottle product from which to make profit or to discount to consumers.
 13. Consider tracking the number and case price of "out-of-stock" items ordered each day that cannot be filled by the warehouse. Use these figures to calculate the lost opportunity cost of each out-of-stock situation (number of cases ordered but unavailable times the price per case equals the sales lost to DLC that day). Assess a penalty to suppliers/brokers that cause frequent out-of-stock events.
 14. Consider the Wyoming Department of Revenue Liquor Division policy on new product listing for products that "just can't wait". The Wyoming Liquor Division offers industry representatives a mechanism to use in submitting new products for listing without having to wait until the next regularly scheduled presentation time. This would be a quicker way for

new or fast breaking products to be available to Vermont consumers in between the regular listings, rather than requiring Board action on each listing/delisting action.

15. There are areas of the State of Vermont which are currently “underserved” by the DLC (i.e., the DLC believes the population base warrants a State Agent, but there is no current contract store). In several cases, the DLC has advertised for a contract Agent, but received no responses. The DLC should consider offering a temporary increase in the Agent commission, e.g., a one or two percent increase over the standard commissions for the first two years of operation, to ensure full coverage of the State by Vermont-based outlets.